

CLAIMSSUB
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1. A runflat tire having an axis of rotation, the tire comprising:
a pair of axially-spaced bead portions;
a pair of axially-spaced sidewalls;
each of the sidewalls including a sidewall insert; and
each of the sidewalls having a radial portion and a cantilever portion, the
cantilever portion being cantilevered with respect to the bead portion.

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2. The tire of claim 1, wherein the cantilever portion includes a portion of the
sidewall insert.

3. The tire of claim 2, wherein the sidewall insert includes a cantilevered portion
disposed in the cantilever portion of the sidewall.

4. The tire of claim 3, wherein the sidewall insert includes an axially inner end
disposed adjacent the radially outer end of the bead portion.

5. The tire of claim 4, wherein the cantilever portion is disposed at an angle in
the range of +30 degrees to -30 degrees with respect to the axis of rotation of
the tire.

6. The tire of claim 5, wherein the sidewall insert is crescent shaped.

7. The tire of claim 1, wherein the cantilever portion includes a portion of the bead portion.

8. The tire of claim 7, wherein the bead portion includes a cantilevered portion disposed in the cantilever portion of the sidewall.

9. The tire of claim 8, wherein the bead portion includes an axially outer end disposed adjacent the radially inner end of the sidewall insert.

10. The tire of claim 9, wherein the cantilever portion is disposed at an angle in the range of +30 degrees to -30 degrees with respect to the axis of rotation of the tire.

11. The tire of claim 10, wherein the sidewall insert is crescent shaped.

12. The tire of claim 7, wherein the bead portion includes a radially outer end disposed adjacent the radially outer end of the sidewall insert.

13. The tire of claim 12, further comprising first and second body plies; the bead portion being disposed between the first and second body plies.

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14. The tire of claim 13, wherein the bead portion includes a bead core and a bead filler; the first body ply is turned up around the bead core and the second body ply has an end disposed adjacent the bead core.

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15. The tire of claim 14, wherein the turned up portion of the first body ply is disposed axially outward of the second body ply.

16. The tire of claim 15, wherein the sidewall insert is crescent shaped.

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17. The tire of claim 7, wherein the bead portion includes a bead core and a bead filler; the tire further comprising first and second body plies; the bead filler being disposed between the first and second body plies in the cantilever portion of the sidewall.

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18. The tire of claim 7, wherein the cantilever portion of the sidewall also includes a cantilevered portion of the sidewall insert.

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19. The tire of claim 18, wherein the bead portion includes a bead core and a bead filler; the tire further comprising first and second body plies; the bead filler being disposed between the first and second body plies in the cantilever portion of the sidewall.

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20. The tire of claim 19, wherein the sidewall insert is crescent shaped.

21. The tire of claim 1, wherein the bead portion includes a bead filler; the bead filler and the sidewall insert being fabricated from the same material.

22. The tire of claim 21, wherein the material of the insert and the bead filler are fabricated from a hard, high modulus rubber compound having a Shore A Durometer between 70 and 97, a mechanical static modulus in the range of 1400 psi to 4000 psi at 15% strain, and loss tangent delta ($\tan \delta$) between 0.03 to 0.2 measured at 100°C, 7% deflection, and 10Hz.

23. The tire of claim 1, wherein the bead portion includes a bead filler; the bead filler and the crescent shaped insert are fabricated from a high modulus low hysteresis material.

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24. The tire of claim 1, further comprising a stiffener ring connected to each of the sidewalls at the cantilever portion.

25. The tire of claim 24, wherein each of the sidewalls has an inner surface; the stiffener ring connected to the inner surface.

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26. The tire of claim 24, wherein the stiffener ring is embedded within the sidewalls.

27. The tire of claim 26, wherein a belt package is at least partially disposed within the sidewalls.

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28. The tire of claim 27, wherein the stiffener ring is disposed inside the body cords.

29. The tire of claim 27, wherein the stiffener ring is disposed outside the body cords.

30. The tire of claim 27, wherein the belt package includes at least two layers; the stiffener ring being disposed between the body cords.

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31. The tire of claim 1, wherein the tire includes a crown portion and a runflat band element disposed in the crown portion of the tire.